

**REMARKS**

Claims 10-18, 26-29 and 31 are pending in this application. Claims 26-29 are allowed. Claims 15 and 31 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Claims 10-14 and 16-18 are rejected in this action. The Examiner's comments are addressed in substantially the same order as presented in the Office Action.

**REJECTIONS UNDER 35 USC § 102**

The examiner has rejected claims 10, 11, and 16 under 35 U.S.C. 102(e) as being anticipated by Meehan (US 6535458). Applicants respectfully traverse this rejection. A claim is anticipated only if each and every element as set forth in the claim is found either expressly or inherently described in a single prior art reference.

**Regarding claims 10 and 16:** The examiner has stated that Meehan discloses an apparatus and method for performing acoustic investigations while drilling a borehole comprising: a longitudinally extending body (e.g. Fig. 3A: 10) conveyed in the borehole on a drilling tubular the body and the tubular having fluid flowing through (Col. 1:8-14); an acoustic transmitter (Fig. 3A: 302) supported by the body, the transmitter generating acoustic signals in the body, the borehole and the subsurface formations; an acoustic receiver (e.g. Fig. 3A: 304) spaced apart from the transmitter (e.g. Fig. 3A:302) and supported by the body for receiving the acoustic signals; and an attenuator (e.g. Fig. 3A:303) located on a substantially cylindrical portion of the body, between the acoustic transmitter (e.g. Fig. 3A:302) and the acoustic receiver (e.g. Fig. 3A: 304) for attenuating

the acoustic signals in the body within a predetermined frequency range; wherein the attenuator comprises a plurality of spaced-apart masses (e.g. Fig. 3A:303, the grooves in 303 form rings) having a predetermined spacing, mass and length, **attached to an external surface of an outer wall of the cylindrical portion of the body (Col. 6:31-44)**. Applicants respectfully request that the examiner reconsider this analysis. Merriam-Webster defines attach as,

**4** : to make fast (as by tying or gluing) *<attach a label to a package>*.

The masses described by Meehan are circumferential grooves 307 (Fig. 3B) cut into the outer surface of the collar sub(col. 6, lines 31-37). The masses are integral with the collar sub. Clearly they are not attached, as claimed by applicants. For this reason, applicants assert that claims 10 and 16 and the claims dependent on them are allowable under 35 USC 102.

### **REJECTIONS UNDER 35 USC § 103**

Claims 12-14, 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Meehan as applied to claims 10 and 16 above, and further in view of Hoyle et al (US 5,043,952). Applicants respectfully traverse these rejections.

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the

prior art, not in applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

**Regarding claims 12,17:** The examiner states that Meehan teaches the limitations of claims 10 and 16. Applicants have shown above that Meehan does not teach, disclose, or suggest attaching masses to an outer surface as claimed by applicants in claims 10 and 16. For this reason, applicants assert that claims 10 and 16 and their respective dependent claims are allowable under 35 USC 103.


**Regarding claims 13,18:** The examiner states that Meehan teaches the limitations of claims 10 and 16. Applicants have shown above that Meehan does not teach, disclose, or suggest attaching masses to an outer surface as claimed by applicants in claims 10 and 16. For this reason, applicants assert that claims 10 and 16 and their respective dependent claims are allowable under 35 USC 103.

**Regarding claim 14:** The examiner states that Meehan teaches the limitations of claims 10 and 16. Applicants have shown above that Meehan does not teach, disclose, or suggest attaching masses to an outer surface as claimed by applicants in claims 10 and 16. For this reason, applicants assert that claims 10 and 16 and their respective dependent claims are allowable under 35 USC 103.

Consideration of the application as discussed is respectfully requested. The Commissioner is hereby authorized to charge any fee and credit any overpayment associated with this response to **Deposit Account No. 02-0429(414-13238-CIP)**.

Respectfully submitted,

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